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# Buds of the Banner

A Guide to Growing Native Trees and Shrubs in Clare



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## *The aim of this guide is...*





 To inspire the people of Clare to plant native trees and shrubs because they make a beautiful addition to gardens, public green spaces, urban and rural landscapes, and because of their enormous benefits for wildlife and the environment.

 To provide practical advice and information on what, when, where and how to plant native trees and shrubs. Many of our native trees and shrubs are highly attractive and ideal for planting in gardens, big and small.

 To encourage the retention of all existing trees, shrubs and hedgerows on development sites. Keeping such features protects the rural character of the Clare landscape, adds considerable aesthetic, environmental and wildlife value to new developments, and saves money on landscaping.



 To show that keeping existing trees and hedgerows in new developments, and landscaping with native trees and shrubs, helps to blend rural houses into the landscape.

 To complement the County Clare Rural House Design Guide, which demonstrates the importance of good siting and sensitive design when building in the Clare countryside.





# Introduction

## Trees enrich our lives and landscapes

Trees inspire awe because they can be huge—towering way above us, hundreds of years old, and stunningly beautiful. They come in a vast array of shapes, sizes, textures and colours. Even small trees with a spectacular display of spring flowers or brilliant autumn colours can take our breath away. Old gnarled trees invite tree climbing adventures. Resilient urban trees add life and fresh air to what would otherwise be a concrete jungle of city streets.

Trees help keep us in touch with the seasons as their leaves and flowers appear in spring and early summer, followed by nuts or berries in late summer. In autumn, the leaves often change colour before they fall, heralding the arrival of winter. Large, majestic specimens enrich landscapes, adding colour and structure. Trees provide a haven for a vast array of wildlife in search of food and shelter. Trees and hedgerows also create a sense of place. Trees, woodland, scrub and hedgerows are prominent features on the Clare landscape.

Trees witness the passing of time, often living through famines, floods and wars. Their annual growth rings hold a record of past climates, which is of huge interest to scientists trying to predict future changes. Trees are a precious legacy from previous generations and one that we can pass on to our children.

Our ancestors recognised the enormous value of trees because of their dependence on them as a source of timber, fuel, food and medicine. Trees were regarded as sacred and had an important symbolic value in mythology and folklore. They often marked important places such as royal inauguration sites or holy wells. In the first Irish alphabet, Ogham, the letters were named after trees, which reflects their importance in Irish society at the time.

Pre-Christian and early Christian Irish society was regulated by ‘Laws of the Neighbourhood’, also known as the Brehon Laws. Under these laws, trees and shrubs were ranked according to their economic value and classified into four groups: 1. Nobles of the wood (e.g. oak, hazel and holly), 2. Commoners of the wood (e.g. alder, willow and rowan), 3. Lower divisions of the wood (e.g. blackthorn, elder and spindle) and 4. Bushes of the wood (e.g. gorse, bramble and broom). Large fines were imposed on anyone that damaged trees belonging to someone else.

Many place-names in Clare are derived from trees. For example, Derrymore or Doire Mor translates to great oak-wood; Ardskeagh or Ard Sceach means hill of the hawthorns while Moyhullin or Magh Chuilleann translates to plain of holly. The widespread use of trees in place-names reflects a past when trees were a more common feature on the Clare landscape and the high regard in which trees were held by our ancestors.





*Brian Boru oak from Raheen Woods near Tuamgraney*



*Street in Ennis with Rowan and Cherry trees*

The Tree Council

One of the oldest and best known oak trees in the country is the ‘Brian Boru Oak’ in Raheen Woods, Tuamgraney. This magnificent tree has a girth of nearly eight metres and a height of 25m. Brian Boru was reputedly born nearby. Other champion trees include the Japanese cedar that grows in the grounds of Caher House, Caher, probably the largest specimen in Europe. The tallest sitka spruce in Ireland (42m!) grows in the same garden. An even larger oak than the Brian Boru Oak is found in Oak House, Mountshannon, the largest pedunculate oak in Ireland (girth over 9m and height 32m). See [www.treecouncil.ie](http://www.treecouncil.ie) for more information on heritage and champion trees in County Clare.

Following the end of the last ice age, about 10,000 years ago, Ireland was covered from coast to coast by tall mixed forests for several thousand years. Forest cover started to decline about 6,000 years ago after the arrival of the first farmers who cleared the woods to create pastures and cultivate the land. Most of county Clare was also blanketed by woodland, including the Burren even though it appears so inhospitable to trees today.

Clearance of the hazel-dominated woodlands in the Burren led to extensive erosion of the thin soils and exposed the rocky landscape we see today. The long and rich history of human activity in Clare led to a steady decline in tree cover and only a few small areas of woodland

remain today, such as, Dromore and Glenomra Woodlands. There is however a wealth of hedgerows, particularly in the east of the county, which provide a refuge for woodland plants and animals.

The landscapes of County Clare are rich and diverse, and in many cases of outstanding natural beauty. New developments with a high standard of house design and good siting, as well as appropriate use of materials, orientation and inclusion of traditional elements, can make a positive contribution to the landscape and character of an area.

Appropriate landscaping with native trees and shrubs greatly helps to integrate new houses and buildings into the landscape, especially in a rural setting. The retention of existing trees and hedgerows, and new planting in developments, helps to minimise the visual impact of a building and preserve the rural character of the landscape.

Trees in large or small gardens, housing estates and public green spaces add immeasurable aesthetic pleasure, wildlife value and environmental benefits. Whatever the size of your space, there is a tree that will enhance it now and for many generations to come. Trees have many attractive features to work with when designing your garden (leaves, flowers, bark, form, berries and nuts) some of which change during the seasons adding interest and variety to your garden or green space.



Trees in urban areas provide invaluable habitat for wildlife. They also contribute to the green infrastructure by providing corridors for wildlife, and they can help link urban and rural habitats.

Native trees and shrubs are ideal for helping to create a wildlife-friendly garden as many animals are dependent on them for food and shelter. So if you want a garden that will attract birds and butterflies, plant a few native trees and shrubs. The Tree Selection Guide on the inside back cover will help you to decide what to plant to increase the wildlife value of your garden.

Climate change is predicted to have major impacts on the environment, nature and wildlife, and societies globally. Planting trees helps to combat climate change because trees take up vast amounts of carbon dioxide as they grow. This carbon is locked in the trees as wood for the lifespan of the tree. Forests thus act as a ‘sink’ for carbon dioxide.



Clockwise from top left: Birch trees, Sloe berries, Guelder Rose berries, Rowan flowers

## Benefits of planting native trees/shrubs

- Make gardens and public green spaces more attractive by adding colour and interest, and improve the scenic appearance of rural landscapes
- Have an enormous value for wildlife
- Add contrasting texture, colour and structure to built-up areas making them more attractive places to live and work
- Bring a sense of maturity to new developments and can increase property values by anything from 5-18%
- Screen unattractive views, absorb noise and provide privacy
- Greatly enhance the amenity value of urban and rural developments
- Help fit new houses and buildings into the landscape
- Provide shade and shelter from the elements; considerably reduce heating costs by sheltering buildings
- Improve air quality in urban areas by filtering dust and air pollutants, and releasing oxygen.



Oak leaves



**Top Left:** Lichens

**Top Right:** Bird box in a tree

**Bottom Left:** Ivy leaves and berries

## Why are native trees of special value?

Native species of plant or animal are generally considered to be those that managed to arrive in Ireland naturally, without the assistance of people.

Native trees and shrubs are adapted to environmental conditions in Ireland and for that reason grow best here. They tend to benefit a huge range of wildlife as they have been present on the Irish landscape for thousands of years.

For example, oak trees provide food and shelter to over 450 species of insects. Not to mention all the birds, bats, ferns, mosses, lichens and fungi that seek food, shelter and/or roosting sites on a mighty oak! Most other native trees and shrubs also have a high value for wildlife. Birch trees support over 200 different types of insects, and alder, elm and Scot's pine support over 80 each.

A truly native tree or shrub is one grown from Irish seed and ideally should be planted in the vicinity of where the seed was collected. Plants grown from seed from Kerry may not thrive as well in the Donegal climate as they would in the south-west of the country. The supply of native trees and shrubs grown in Ireland and from Irish seed has increased in recent years due to a growing awareness of the value of native stock. If you are buying native trees and shrubs, however, it is a good idea to check that they are truly native. If you have time on your side, you could collect seed from your local area and



*Alder leaves in frost*



*Oak seedlings*

try raising your own plants. Growing trees is a fantastic long-term project for children.

The promotion of native trees and shrubs doesn't mean there isn't a place for non-natives. Many non-native species of trees and shrubs have been introduced to Ireland over the past few centuries, such as beech, horse chestnut and sycamore. Many of these trees are very attractive and have become a familiar sight on the Irish landscape, although they don't usually support as wide a variety of wildlife as native species. In some places, especially exposed coastal locations, non-natives form the only tree or shrub cover and therefore are of value as they provide shelter for wildlife (and people!).



*Beech—not a native tree*

*Bat box on oak tree*





## Native trees and shrubs



*Guelder Rose berries*

*The features of the main native trees and shrubs found in County Clare are described here.*

*This information is also summarised in the Tree Selection Guide inside the back cover.*

**Note:**

Maximum height is indicated for each tree and shrub species in the following pages. Maximum height is only rarely attained as height can vary considerably depending on environmental conditions e.g. degree of exposure, soil depth or fertility. The suitability of each species for use in a hedge is also indicated.



Alder cones

### Alder (Fearnóg) *Alnus glutinosa*

Alder is a fast-growing medium-sized tree generally found on wet soils along streams and lake edges but it will grow on most soils.

Alder is a productive tree for timber and might be worth considering if you have a bit of space and fancy some wood for your fire. As a fast-growing tree, alder can be used effectively to provide screening and/or shelter where urgently required. Alder is an unusual broad-leaved tree because the female flowers produce cones, not

unlike the cones that conifers such as pine and spruce produce. These small, attractive cones last through the winter. Another interesting feature of this tree is that the roots are able to convert atmospheric nitrogen (which is a gas), into a form that the plant can use. It thus produces its own fertiliser and in doing so enriches the soil. Alder seeds last for a long time and are good for birds and red squirrels.



20m		<b>Soil:</b> Grows in a wide variety of conditions including wet soils
		<b>Hedging:</b> Yes <b>Growth:</b> Fast



### Apple, Crab (Crann fia-úll) *Malus sylvestris*

Crab apple is often found growing around old farmsteads, in hedgerows and occasionally in old woodlands. A small tree, which produces pretty pinkish-white blossoms, it is ideally suited for gardens either as an individual or as a hedgerow tree. Crab apple thrives in fertile soils, preferably neutral to lime-rich.

It can tolerate heavy but not wet soils. Crab apples have long been used to make jellies, jams and wine. Birds and insects appreciate the heavy crops of apples.



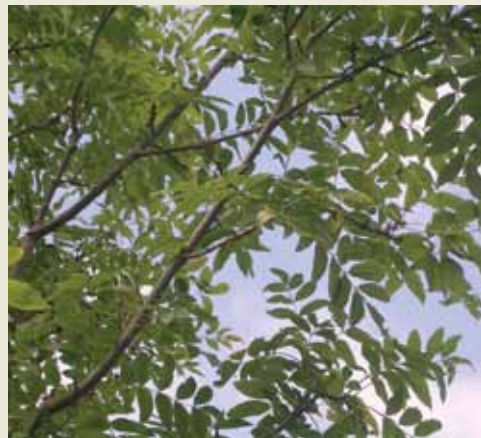
The Irish Seed Savers Association (ISSA), based in Scariff, are an organisation dedicated to the conservation of native apple trees. The ISSA nursery (contact details in Appendix 3) offers a wide selection of native Irish varieties of apple trees including a very prolific wind-resistant variety from Co. Clare, Ballyvaughan Seedling.

4m		<b>Soil:</b> Thrives in most fertile soils (not acid or wet)
		<b>Hedging:</b> Yes <b>Growth:</b> Slow




### Ash (Fuinseóg) *Fraxinus excelsior*

Ash is very common as a woodland and hedgerow tree in county Clare. A large handsome tree, it can grow in a wide range of conditions with the exception of acidic or peaty soils. It can tolerate damp and heavy soils but it needs plenty of light to grow well. Stunted forms of ash are often found growing with hazel, rowan and/or holly in pockets of soil on limestone pavement in the Burren. It can grow in exposed sites and windswept coastal areas. The light green foliage of ash turns a pale yellow in autumn. It is the preferred wood for producing hurleys because of its strength and flexibility. The seeds are valued by birds, small mammals and red squirrels.



Ash leaves

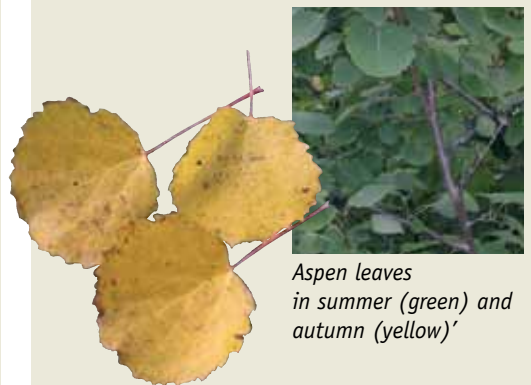
28m		<b>Soil:</b> Grows in a wide range of soils (not acid)
		<b>Hedging:</b> Yes <b>Growth:</b> Medium




### Aspen (Cramn creathach)

#### *Populus tremula*

Aspen is an uncommon native tree mainly found growing in wet areas and around lake edges. Black poplar (*Populus nigra*) may also be native but the jury is out on that one. Aspen suckers very readily and may take over areas with ideal conditions (i.e. damp sites with good soil) unless cut back so be warned! It prefers rich damp, neutral soils with a medium to heavy texture but it can tolerate poor soils. Aspen is large, attractive fast-growing tree which puts on a beautiful autumn display when the leaves turn bright yellow. The leaves appear to tremble when the wind blows through them- hence the scientific name. They usually stay on the tree for some time before eventually falling. Aspen is good for insects.



Aspen leaves in summer (green) and autumn (yellow)


24m		<b>Soil:</b> Prefers damp, neutral soils (not acid)
		<b>Hedging:</b> No <b>Growth:</b> Fast




**Downy Birch (Beith chlúmhach)**  
*Betula pubescens*  
**Silver Birch (Beith gheal)**  
*Betula pendula*

There are two species of birch native to Ireland, downy and silver. Downy birch is the more common of the two. They are usually found growing along lake edges, on dried out bogs, on marginal soils and the edges of fens. Both species of birch are graceful trees with fine branches and small leaves which turn yellow in autumn. Silver birch has a black fissured trunk while the bark of downy birch is usually relatively smooth and whitish. Birch grows in a wide range of conditions including poor soils and at high elevations. Downy birch will grow in damp soils but silver birch needs good drainage. Both like lots of light to grow well and prefer acid to neutral soils. Birch trees generally don't grow too large and therefore make an excellent ornamental garden tree. As a pioneer species, birch will enrich the ground on a poor site. The seeds provide food for birds and red squirrels. Dead birch wood provides an ideal habitat for many insects and fungi.

**Downy Birch**

24m		<b>Soil:</b> Grows in a wide variety of soils (prefers acid to neutral)
	<b>Hedging:</b> No <b>Growth:</b> Fast/Med	

**Silver Birch**

18m		<b>Soil:</b> Prefers dry soils, acid to neutral
	<b>Hedging:</b> No <b>Growth:</b> Fast/Med	




Blackthorn flowers

**Blackthorn/ Sloe (Draighean)**  
*Prunus spinosa*

A shrub with long, sharp thorns often found in hedgerows, blackthorn stands out in early spring when masses of pretty white flowers appear before the leaves (unlike hawthorn, the flowers of which appear after the leaves are out). Blackthorn grows in a wide variety of soils with the exception of very wet conditions. It can tolerate exposed and coastal sites. Blackthorn forms a dense scrub, which will spread if not regularly trimmed or grazed back. The berries or sloes look like small plums but are very sour to eat. They have been traditionally used to flavour poteen and gin. Insects like the early source of pollen and nectar in the blackthorn flowers. The thorny bush provides good nesting cover for birds while the berries are a valued source of food for birds and small mammals. Blackthorn is an ideal hedging plant especially if a stock-proof hedge is required. A shillelagh made from blackthorn was traditionally the weapon of choice but is now produced solely for the tourist trade.



Sloe berries

4m		<b>Soil:</b> Grows in a wide variety of soils
	<b>Hedging:</b> Yes <b>Growth:</b> Medium	

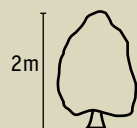
John Conaghan



### Broom (Giolcach sléibhe)

#### *Cytisus scoparius*

Broom is a small shrub which produces spectacular displays of bright yellow flowers, not unlike gorse. It differs from gorse in that it doesn't have spines on the stems and the flowers only appear in mid-summer. Broom grows well on light, dry acid soils and is tolerant of exposure. It is the main foodplant for the green hairstreak butterfly.



**Soil:**  
Prefers light, dry, acid soils

**Hedging:** Yes    **Growth:** Fast



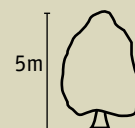
### Buckthorn, Purging (Paide bréan)

#### *Rhamnus catharticus*

An uncommon shrub, purging buckthorn can be found growing around turloughs and lake shores. It can tolerate poor clay soils and is largely confined to areas with lime-rich soils. Buckthorn has attractive bright green, glossy foliage and shiny red berries that eventually turn black. The leaves turn yellow in the autumn. Purging buckthorn is good for birds and insects, and is the main food plant for the brimstone butterfly.



*Purging Buckthorn leaves and berries*



**Soil:**  
Prefers damp and lime-rich soils

**Hedging:** Yes    **Growth:** Medium

Bird Cherry



Wild Cherry



**Bird Cherry (Donnroise)**

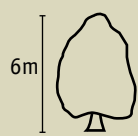
*Prunus avium*

**Wild Cherry (Crann silín fiáin)**

*Prunus padus*

There are two native species of cherry in Ireland, the common wild cherry and bird cherry. Wild cherry has a preference for slightly acid soils but will do well on deep loams over limestone. Bird cherry is found in damp soils in the wild but will tolerate drier sites (acid to neutral soils). Wild cherry is often found in hedgerows, particularly associated with old homesteads. Bird cherry is an uncommon species mainly found in damp woods in the northwest of the country, however, there are a few records of bird cherry in County Clare. Both cherries are widely planted and both are attractive small to medium sized trees well-suited to gardens. Wild cherry produces masses of white flowers in clusters while the almond-scented white flowers of bird cherry are arranged on long spikes. Cherry tree leaves turn shades of yellow, pink and orange in the autumn. The fruit is much sought after by birds and insects.

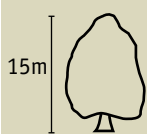
**Bird Cherry**



**Soil:**  
Prefers fertile, deep well-drained soils that are slightly acid

**Hedging:** No    **Growth:** Medium

**Wild Cherry**



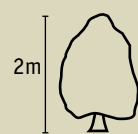
**Soil:**  
Prefers damp soils (acid to neutral)

**Hedging:** Yes    **Growth:** Fast/Med



**Dog Rose (Feirdhris) *Rosa canina***

Dog rose is commonly found in hedges, particularly in long-established hedgerows. Dog rose grows in a wide variety of soils but not wet conditions. It prefers lime-rich to neutral soils. The beautiful flowers of this wild rose range in colour from white to dark pink. The large red berries appear in autumn and add a vibrant splash of colour to the hedges in which they grow. Birds and small mammals are particularly fond of these berries which are rich in vitamin C.



**Soil:**  
Tolerates a wide range of soils (not acid)

**Hedging:** Yes    **Growth:** Fast



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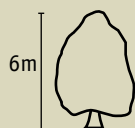
Elder leaves and flowers

### Elder (Tromán)

Elder is a common shrub often found in hedgerows and in association with old farmhouses or waste land where there are fertile soils. Some people consider elder a weed but it is highly valued by wildlife. Elder produces beautiful splays of creamy-coloured flowers which can be used to make elderflower cordial or dried to make elderflower tea. The purple berries are also often used to make wine.



Elder leaves and berries



6m

#### Soil:

Grows in a wide variety of soils (not acid)

**Hedging:** Yes

**Growth:** Fast



Sasha Bosbeer

Elm leaves and fruits

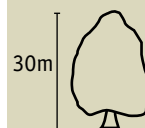
### Elm, Wych (Leamhán sléibhe)

#### *Ulmus glabra*

A native tree species, wych elm appears more resistant to Dutch elm disease than the widely planted English elm. Wych elm and varieties of it were also widely planted in the past, mostly for timber. It is a large, attractive tree that can live for up to 500 years. Truly native wych elm is mainly found today in mountain glens in the northwest of the country. Elm can grow large but it mostly occurs in hedgerows or as small trees today (following the outbreak of Dutch elm disease). Elm thrives in fertile and free draining soils. Elm wood is highly valued for crafts and furniture making. The early flowers of elm are visited by many insects and the seeds are valued by red squirrels.



Young Elm leaves



30m

#### Soil:

Prefers fertile free-draining soils

**Hedging:** Yes

**Growth:** Medium



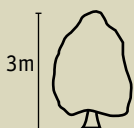


**Gorse (Aiteann) *Ulex***

Gorse is also known as furze or whin depending on what part of the country you are in. Highly recognisable, gorse produces spectacular displays of yellow flowers which produce a sweet perfume in spring and autumn. Gorse is commonly found in coastal and upland heaths, in hedgerows and woodland edges. It can grow in exposed sites and withstands salt-laden winds. It thus provides shelter in coastal locations. Gorse generally prefers dry and neutral soils. It is good for insects and provides excellent nesting cover for birds. Gorse is an important food-plant for the green hairstreak butterfly. Spiders often cover the bushes with their webs.



Sasha Bosbeer



**Soil:**  
Prefers dry and neutral to acid soils

**Hedging:** Yes **Growth:** Medium



Guelder Rose leaves and flowers

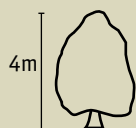
**Guelder Rose (Caorchon) *Viburnum opulus***

Guelder rose is a highly attractive shrub commonly found in hedgerows, damp woodlands, lake and turlough edges, and scrubby areas in the Burren. It prefers lime-rich, fertile clay soils and can tolerate wet conditions. The beautiful, showy white flowers



Guelder Rose leaves and berries

are followed by bright red berries in early autumn. The foliage turns various shades of orange and red adding to the spectacular autumn display. This small shrub is ideal for planting as an individual in gardens and as a hedging plant. It is good for insects and the fruit is highly valued by birds.



**Soil:**  
Prefers damp lime-rich soils

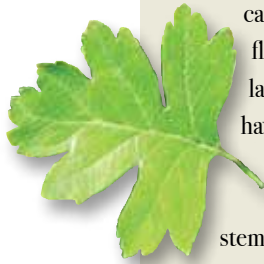
**Hedging:** Yes **Growth:** Medium

John Conaghan



**Hawthorn (Sceach gheal)**  
*Crataegus monogyna*

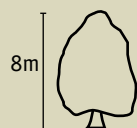
Our most common hedgerow plant, hawthorn can put on a stunning display of white flowers in spring and red berries in late summer and autumn. The leaves of hawthorn are lobed which differentiates it from blackthorn, which has simple, oval-shaped leaves. The thorny stems of hawthorn make it highly suited to forming stock-proof hedgerows. Hawthorn can also be planted as an individual where it forms an attractive small tree. It flowers and fruits prolifically if uncut. Hawthorn will grow in a wide range of soils although it prefers neutral to lime-rich soils with a medium to heavy texture. A hardy plant, it tolerates exposed locations and grows well in industrial sites. Hawthorn has a high wildlife value as the early flowers are visited by insects and the fruits are much sought after by insects and birds. It also provides good cover for nesting and roosting birds.



Hawthorn berries



Hawthorn flowers



**Soil:**  
Grows in a wide variety of soils (not acid)

**Hedging:** Yes    **Growth:** Med/Fast



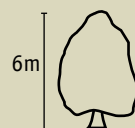
**Hazel (Coll) *Corylus avellana***

A small tree or shrub, hazel is commonly found growing in hedgerows, as part of the understorey in oak and ash woodlands, or in stands of pure hazel, especially in the Burren. Hazel prefers heavier, fertile, neutral to lime-rich soils which are well-drained. It grows well on hillsides and steep banks. Hazel also coppices well (i.e.



Hazel catkins (flowers)

produces more shoots when cut at the base). An example of coppicing as a form of woodland management can be seen at Aillwee Caves in the Burren. The delicate catkins (clusters of tiny flowers) appear in the spring before the leaves appear on the trees. In autumn the leaves turn various shades of yellow and brown. The relatively large nuts are a good source of protein valued by squirrels, mice and some birds.



**Soil:**  
Grows in a wide variety of soils (not acid)

**Hedging:** Yes    **Growth:** Med/Fast

John Conaghan



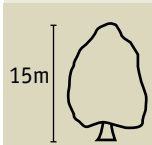
**Holly (Cuileann) *Ilex aquifolium***

Holly is one of the few native broad-leaved evergreen trees. A hardy plant, it can be found growing in a wide range of conditions and soils including mature woodland (where it can survive deep shade), in hedgerows, upland heaths or rocky gullies, and on limestone pavement.



A highly attractive small tree, holly is very suitable for gardens as a specimen tree or as a hedge.

Holly trees are either male or female so it is worth planting several together to ensure you have both sexes as only the female flowers produce berries. Holly is tolerant of exposed sites and makes a wonderful high sheltering screen or hedge although it is slow-growing. It has been used throughout the ages for medicinal purposes, for timber carving and as a decoration to celebrate Christmas. Unfortunately in some areas, the over-use of holly for decoration is unsustainable and may make it locally extinct. The berries are slightly poisonous but birds love them, particularly thrushes. Holly provides good roosting sites for birds in winter. It is the main food plant of the holly blue butterfly.



**Soil:**  
Grows in a wide variety of soils

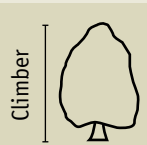
**Hedging:** Yes    **Growth:** Med/Slow



**Honeysuckle (Féithleann)**

***Lonicera periclymenum***

Honeysuckle is a woody climber commonly found in native woodlands and hedgerows. It prefers neutral to light acid soils. As a climber honeysuckle needs to be planted near a wall or hedge over which it can grow. The large, showy flowers of honeysuckle produce a sweet scent at night to attract moths. The bright red berries that appear in late summer are a valuable source of food for birds.



**Soil:**  
Prefers neutral to acid soils

**Hedging:** No    **Growth:** Medium



*Juniper needles and berries*

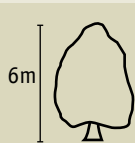
**Juniper (Aiteal)**

***Juniperus communis***

Juniper is commonly found growing on bare limestone in the Burren, and at high elevations in upland areas. It is highly tolerant of exposure. Although it can grow into a small tree it usually forms a low spreading shrub following the contours of the rock. One of our few native evergreens, juniper is an unusual but attractive shrub. The berries of juniper are used commercially to flavour gin. This plant could be one to consider for your rockery.



*Juniper on limestone*



**Soil:**  
Grows in rocky areas

**Hedging:** No      **Growth:** Medium



*Pedunculate Oak*

**Oak**

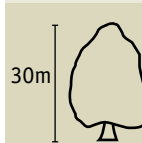
Large woodland trees that were one of the dominant trees in Ireland's primeval woodlands, oaks were harvested for centuries for their fine timber.

They were also widely planted in woods and demesnes and therefore truly 'native' oaks can be hard to find. Oaks can grow to a great size and very old age. They can be easily grown from seed (although they don't produce a large crop of acorns every year) so it is worth gathering acorns in autumn and having a go. Although oaks take a long time to reach maturity, young oaks are highly attractive and by planting an oak you'll be leaving something wonderful for the next generation to enjoy. Oaks are renowned for their enormous wildlife value as they provide food and shelter for numerous types of insects, as well as, many kinds of birds, bats and small mammals. Large, old oaks are also often festooned with ferns, mosses and lichens.



*acorns*

**Sessile Oak**



**Soil:** Prefers well-drained, acidic to neutral soils. Tolerates less rich and lighter soils than *Q. robur*.

**Hedging:** No      **Growth:** Medium



Oak leaf



Sessile Oak

There are two native species of oak in Ireland, sessile and pedunculate oak. Red oak (*Quercus rubra*) is not a native species of oak, and is commonly available in garden centres. Oak produces very fine timber which has been highly valued for centuries. Many townlands in Clare contain the word Doire or Derry (Derrybeg, Derryfadda, Derrynacarragh and many more), reflecting how widespread oak woodlands once were in parts of the county.

**Sessile oak (Dair ghaelach)**  
*Quercus petraea*

The main type of oak in Ireland is sessile oak. It is more commonly found on poor acid soils, often in hilly areas, such as parts of east Clare. It is also a large, attractive tree.

**Pedunculate oak (Dair ghallda)**  
*Quercus robur*

The pedunculate oak or English oak is the second native species of oak found in Ireland. It generally grows in areas with heavy lowland soils (neutral and lime-rich) and can withstand wet soil in winter. It can be found in wooded areas with deeper soils in the Burren, around turlough basins and old demesnes or estates such as Dromore Woodland, near Ennis. It is a large, handsome tree.

**Pedunculate Oak**

30m		<b>Soil:</b> Prefers well-aerated, deep fertile soils. Thrives on heavier soils
		<b>Hedging:</b> No <b>Growth:</b> Medium



**Rowan (Caorthan)**  
*Sorbus aucuparia*

Rowan or mountain ash is an attractive, hardy tree ideally suited to small gardens. It produces clusters of beautiful creamy-white flowers in spring and orange- red berries in late summer. The leaves turn various shades of yellow, orange and bright red in autumn. Although it generally prefers well-drained, acid to neutral soils, it can be seen growing on limestone pavement in the Burren in small pockets of peaty soil. Rowan can also tolerate clay soils as long as they are not too waterlogged. It is a small to medium sized woodland tree which occurs throughout Ireland, especially in upland areas where it will grow at high altitude even on rocky ground and exposed sites. Rowan jelly, made from the berries, was traditionally eaten with game. Rowan has also been traditionally used for good luck, good health and to ward off evil spirits! It produces an important berry crop for wildlife



Rowan flowers



Rowan berries

10m		<b>Soil:</b> Grows in a wide variety of soils
		<b>Hedging:</b> No <b>Growth:</b> Fast



**Scot's Pine (Péine albanach)**  
*Pinus sylvestris*

Scot's pine is strictly speaking not a native tree as it became extinct in Ireland in medieval times. It is, nevertheless, a large attractive conifer, which has a relatively high wildlife value. Scot's pine can grow on marginal soils where other trees would not thrive and is tolerant of exposed sites (but not areas with salt-laden winds). It prefers light, sandy soils that are acid to neutral. The bark of Scot's pine turns a shade of orange giving it a very distinctive look which contrasts well with the dark, green foliage. Red squirrels love the seeds of Scot's pine. It is also a good nesting tree for birds and a winter roosting site.



Bark



John Conaahan

Male flowers



	<p><b>Soil:</b> Prefers dry, light soils.</p>
	<p><b>Hedging:</b> No    <b>Growth:</b> Medium</p>



**Spindle (Feoras)**  
*Euonymus europaeus*

Spindle is a hedgerow and woodland shrub that is relatively common (especially on lime-rich soils) but is often overlooked as it is inconspicuous for much of the year. In autumn, however, the leaves turn a beautiful orangey-pink and it produces stunning bright pink berries that split to reveal the orange seed inside. Spindle prefers lime-rich soils but tolerates a wide range of soils. Spindle was traditionally used to make spindles for spinning wheels, hence the name. It is good for insects.



Spindle berries



	<p><b>Soil:</b> Prefers soils damp, lime-rich soils</p>
	<p><b>Hedging:</b> Yes    <b>Growth:</b> Medium</p>



### Whitebeam (Fionnholl) *Sorbus aria*

There are a few native species of whitebeam found growing in Ireland although none are particularly common in the wild. They are widely planted, however, in towns and parks, and in road-planting schemes because of their ornamental qualities. Truly native whitebeams are hard to find but most common in the south of the country. Most prefer lime-rich soils but will grow in a wide range of conditions. They tolerate coastal exposure, rocky ground, some shade and damp sites. The most widespread native whitebeam is *Sorbus aria*, which is most frequent in Co. Galway and north-west Clare. Whitebeams are attractive trees that look well in gardens. Like rowan, whitebeams produce clusters of bright red or orange berries in autumn. The leaves turn gold before falling. The berries of whitebeam are highly prized by birds.

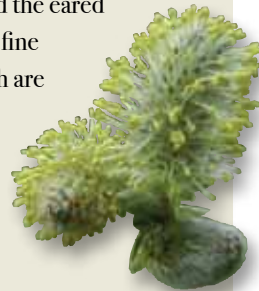


15m		<b>Soil:</b> Prefers neutral to lime-rich soils
		<b>Hedging:</b> Yes <b>Growth:</b> Medium



### Willow/Sally (Saileach) *Salix*

There are several native willows in Ireland and some of them can be difficult to tell apart. They all grow in damp soil often along river and lake edges. They will, however, also tolerate drier sites. The most widespread willow species are the goat willow, the rusty or grey willow (both known as sallies) and the eared willow. Willows with long fine leaves are the osiers, which are used for basket making. Most willows are easy to grow from cuttings and are fast-growing. These attractive trees and shrubs are excellent for wildlife, especially insects and nesting birds. The early flowers (catkins) are an important source of pollen and nectar for bees.



Male Willow flowers



Weaved Willow hedge



Female Willow flowers

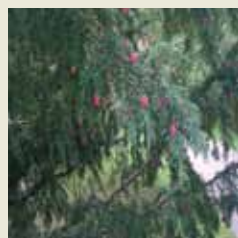
8m		<b>Soil:</b> Generally prefer damp soils with heavy to medium texture
		<b>Hedging:</b> Yes <b>Growth:</b> Medium



Yew needles and berries

### Yew (Iúr) *Taxus baccata*

A long-lived evergreen conifer, yew is native to Ireland although it is most commonly seen planted in old churchyards and estates. A variety of the Irish yew, known as *Taxus baccata* 'fastigata', is widely planted due to its very upright growth form. Some yew trees in Ireland are estimated to be over 1,000 years old and in Britain there are specimens over 5,000 years old! An example of a magnificent large, old yew can be seen in Woodpark, Mountshannon. In the wild, yew generally grows in woodland on limestone pavement but yew woodland is a very rare habitat in Ireland and considered of special conservation significance. Yew prefers well-drained lime-rich soils and can tolerate deep shade. The leaves of yew are poisonous to most livestock and the seeds are also toxic so yew should not be planted where livestock and children may be at risk. It is, however, good for wildlife as birds can eat the fruit and birds roost and nest in the trees. Yew forms a dense, solid



hedge and is ideal for topiary although it is slow-growing. Yew wood is highly prized by woodworkers due to the variations in colour.



#### Soil:

Prefers dry, lime-rich soils

**Hedging:** Yes

**Growth:** Medium



Japanese Knotweed



Rhododendron

### Invasive species

Considered to be a threat to biodiversity globally, invasive species are plants or animals that were introduced by people and pose a threat to biodiversity because they push out native species and/or alter natural environments.

One of our most problematic invasive shrubs is *Rhododendron ponticum*, an attractive shrub that spreads in native woodland generally oak woodland on acidic or peaty soils. Native trees and shrubs are unable to regenerate under the dense shade Rhododendron cast. It can be incredibly difficult to eradicate because it produces millions of tiny airborne seeds and resprouts easily unless treated with herbicide after cutting.

The Japanese knotweed (*Fallopia japonica*), which can be found along the edge of woodlands or in hedgerows, also forms dense stands and it is extremely difficult and expensive to eradicate.

Prevention is much cheaper and easier than the cure, therefore if you suspect there are any invasive or noxious weeds in or near your garden, make sure you don't accidentally cause them to spread further. Many invasive plants are spread through the movement of contaminated soil. It is now an offence under Irish legislation to spread invasive species, including through the movement of contaminated soils.

For information, best practice management and advice see: [www.invasivespeciesireland.com](http://www.invasivespeciesireland.com)



A photograph of a red metal gate leading to a gravel path in a lush green field under a cloudy sky. The gate is made of dark red metal bars and is partially open. The path is made of grey gravel and leads into a field of green grass and various plants. In the background, there are dense green trees and a blue sky with white clouds. The overall scene is bright and natural.

# The importance of soils



*Dromore*

## Soils

One of the most important things to consider when planting a tree or shrub is what type of soil you have (other things to consider are discussed in further detail on page 31). Soil is important because it provides anchorage for trees and supplies them with the water, air and mineral nutrients they need to grow. Some trees and shrubs are quite fussy about the type of soil they grow in whereas others can tolerate a wide range of soil conditions.

You don't want to spend time and money planting trees to find they don't thrive because the soils in your garden are, for example, too wet or acidic for their liking. It should be noted, however, that few trees will fail completely when planted in the wrong place. Trees have the ability to adapt to most soil types but will do best in certain conditions.



*It's worth having a look at the soil before you decide what trees to plant*

Here, the main soil characteristics that are useful to know about when planting trees are described. The Tree Selection Guide on the inside back cover provides details of the soil preferences of our main native trees and shrubs.

**a. pH status:** Is your soil acidic, neutral, or lime-rich (the latter is also referred to as alkaline, base-rich or calcareous)? Soil pH is a measure of the acidity or alkalinity of the soil. Some trees can grow in a wide range of pH conditions (e.g. holly and alder) whereas others do best in a particular pH range (e.g. purging buckthorn is confined to lime-rich soils while wild cherry has a preference for slightly acid soils).

Kits to test soil pH are available in garden centres but you can get clues as to the soil pH in your area by looking at the trees and shrubs growing hedgerows and/or naturally on the landscape (discussed further below).



*Gorse and Willow hedge alongside wet, rushy field*

**b. Texture:** Soils can be described as light, medium or heavy in texture which is related to their clay, silt and sand content. Clay soils are heavy, slow draining and slow to warm up in spring but are often highly fertile. They can be easily compacted (e.g. when driven over by heavy machinery or trampled by livestock) which further reduces drainage.

Sandy soils are light and free draining and usually relatively infertile. They are easily improved, however, by adding organic matter. Silt-rich soils are relatively fertile and reasonably well-drained although drainage can be poor in some situations.

'Loam' soils have a medium texture with the ideal mix of mineral particle sizes which results in good drainage and water retention combined with high fertility.

**c. Moisture content/ drainage:** Some trees don't like getting their roots too wet and as a result don't like sites that become waterlogged from time to time or are always wet. Others can't tolerate extremely dry conditions. The majority prefer sites that aren't too wet or dry.

Drainage is crucial in determining the moisture content of soils, particularly in Ireland where we have a relatively wet climate. Poor drainage leads to intermittent or permanent water-logging.

Some soils that receive a lot of water from rainfall or flood waters can still be well-drained so that trees that don't like to get their roots wet can survive because the water easily drains away.

**Gorse often grows on poor, acidic soils**



### Finding out about your soil

You don't have to be an expert to find out a bit about your soil yourself. This will help you to choose the appropriate types of trees or shrubs to plant.

Before you pick up a spade, have a look at the natural vegetation growing around your house. A stroll along your local hedgerow will tell you which trees and shrubs will thrive in your garden because the local soil is favourable for these species. By knowing the soil preferences of the main native trees and shrubs (see the Tree Selection Guide inside the back cover) you can figure out the local soil type.

As well as looking in the hedgerows, see what other native trees and shrubs are growing in the general area as a guide to what might work in your garden. If you have trouble identifying native trees and shrubs, the photographs in this book should help.

Digging a small test hole with a spade will help you learn more about your soil. The uppermost darker layer (which holds most of the nutrients) will hopefully be over 30cm in depth (although this may not be the case in much of the Burren). Soil can vary from heavy clay (sticky soil when wet that if rolled between your fingers will form a ball) to very sandy soil which allows water to drain quickly away (feels quite gritty between your fingers and will not stick together). Soil can also be peaty, black or dark brown, and spongy. A silty soil feels silky or soapy to the touch.

It is also important to check if water will soak reasonably quickly away from the test hole because the roots of many trees do not like to grow in water. Pour a bucket of water into the test hole. Additional drainage may be required if it takes more than 24 hours for the water to drain away. Certain trees such as willow and alder can tolerate growing in wet conditions.

### Native trees and shrubs and broad soil types

Soil Type	Tolerated or Preferred by (See photos pages 9- 22)
Neutral to Lime rich soils	Ash; Dog rose; Elder; Purging buckthorn; Blackthorn; Pedunculate oak; Guelder rose; Hazel
Acid to Neutral	Downy birch; Honeysuckle; Silver birch; Broom; Bird cherry; Wild cherry; Gorse; Sessile oak; Scot's pine
Wet or damp soils	Alder; Willows; Aspen
Wide range of soil types	Blackthorn; Hawthorn; Holly
Poor or disturbed soils	Alder; Birch; Elder; Scot's pine; Rowan

*\*Most trees and shrubs are quite adaptable and will tolerate a wide range of soil types although they will thrive under certain conditions.*



View of the Slieve Aughties



*Wet grassland with lots of Marsh Orchids*

## Soils in County Clare

County Clare has a diverse range of soils types ranging from thin limey soils in the Burren to acid peats in the Slieve Aughties, and good agricultural soils in lower-lying areas. Soils can vary over a distance of kilometres to centimetres depending mainly on underlying geology but also climate, slope, aspect, drainage and land-use. The main soil types found in County Clare are described below. You don't need to know exactly what type of soil you have in your garden but it helps if you know the main parameters described earlier- pH, texture and moisture content/ drainage:

### 1. Gleys

Gleys are soils with poor or impeded drainage and are often intermittently if not permanently waterlogged. They are generally not suitable for cultivation or intensive grassland farming. Several native species of trees and shrubs can tolerate damp soils with intermittent water logging (e.g. ash, pedunculate oak, hawthorn) but fewer tolerate impeded drainage and permanent water logging (alder and willows).

Gleys are found throughout county Clare. They can occur in depressions and on elevated sites (although they are uncommon in the Burren).

### 2. Peats

Peats are characterised by having a high content (>30%) of organic matter (i.e. predominantly dead plant material and little or no mineral content derived from the parent rock). They are usually at least 30cm in depth.

Blanket peat accumulates under conditions of high rainfall and impeded drainage, usually in areas with acidic rocks (e.g. Mount Callan and Slieve Bernagh). Blanket peat usually provides poor conditions for tree growth unless the peat has dried out sufficiently or is eroded exposing the underlying mineral soil.

Basin peats form in lake basins, hollows and river valleys. Fen peat tends to be relatively nutrient rich but intact fens are usually too wet to support trees but small patches of woodland or scrub (dominated by alder and willow) sometimes develop around the edges of fens or following drainage activities.

Raised bogs are deep accumulations of peat, which are usually very nutrient poor. Raised bog peat is generally not favourable for tree growth unless the peat has dried out considerably.



*Grassland on thin limey soils in the Burren*

### 3. Rendzinas

Shallow soils found mainly in the Burren (uplands and lowlands), usually not more than 50cm deep and derived from lime-rich parent material. Rendzinas often occur in association with bare rock.

The main limitation of this soil type for trees is the shallow depth. Tree roots don't usually grow downwards very far (not much greater than 60cm) but they do require some depth if a tree is to attain anything near its potential height. Shrubs on the other hand can obviously manage with shallower soils.

While much of the rocky landscape of the Burren is not conducive to the growth of large trees, the profusion of scrub in areas indicates that trees and shrubs can manage in this extreme environment (although in many cases they never reach anything near their maximum height except in pockets of deeper soil).

### 4. Brown earths

These are relatively well-drained, mature soils with a medium texture. Most Brown Earth soils occur on lime-deficient parent materials (e.g. shale) and are therefore acid in nature and referred to as Acid Brown Earths.

Small areas with this soil type occur in the south and the east of the county. They

are good for tree growth and support a wide range of trees and shrubs with the exception of those which cannot tolerate base-poor or acid soils.

### 5. Grey brown podzolics

Grey-brown podzolics are usually formed from a base-rich parent material (such as limestone) and occur in areas with a relatively high rainfall as in the west of Ireland. They are generally good all-purpose soils that support a wide range of trees and shrubs with the exception of those that cannot tolerate lime-rich soils.

They can be found predominantly in the centre (in and around Ennis) and east of the county.

### Environment

It is also useful to think a bit about the type of environment in and around your garden before you decide what trees and shrubs you'd like to plant. Are you located on top of a hill or by the coast? Or both?! Is your garden very shady or exposed to full sun? There are trees and shrubs that will tolerate all these conditions. It's just a case of matching the right tree with the right places as described in detail in the next chapter, 'Step by step guides to planting trees and shrubs' (and summarised in the Tree Selection Guide on inside back cover for more).



*Grassland on brown earth soils*



Step by step guide to  
planting trees and shrubs





*The aim of all tree planting efforts should be to plant the right tree in the right place.*

*When planting trees it is important to think about what you hope to achieve before you begin. Choosing the right trees or shrubs for your site and space is critical.*

*Selecting the right type of stock for your purposes and planting well is also essential. Good aftercare will ensure successful results.*

## 1. Think before you plant

It's really worthwhile spending some time thinking about what you hope to achieve from your native planting scheme, before you rush out to buy trees and shrubs. When you go to your local nursery or garden centre, ask yourself the following question:

**Q: Why do you want to plant a few trees and shrubs?**

**A:** To make your garden more attractive;  
To add privacy or shelter;  
To screen the ugly oil tank (or your neighbours new extension!),  
To create a wildlife-friendly garden attractive to butterflies and birds?

If the area to be planted is, for example, a public green space, housing estate or industrial area, again the function of the planting and the needs of the community/residents/workers should be considered carefully. Trees can provide amenity and wildlife value, screening and shelter in public spaces.



*Large ash tree retained on development site*

It is also important to consider whether new trees will overshadow your house or your neighbours, whether hard landscape features such as walls or paths will be damaged by expanding roots, or whether branches might interfere with overhead wires. Careful selection of the right trees and shrubs for your space will avoid any potential problems.

On a new site, it is a good idea to work with what you have already by retaining existing trees, shrubs and hedgerows. By doing so you can create a mature garden instantly, which can be complemented by new planting and, you will save money on landscaping.

Are there a few existing mature trees that would benefit from a bit of tender loving care? Is there a native hedgerow nearby? Could you expand it along the property boundaries thus greatly increasing the wildlife value of your garden? Before you let any heavy machinery on site, decide what you want to retain and ensure they are adequately protected during the building process (see page 49 for more information on tree retention).

**Golden rule—  
work with what's there**





## 2. Choosing the right native tree or shrub

The next important question to ask yourself is

**Q: What tree and shrub species (types of plants) will suit your site?**

**A:** In order to plant the right tree in the right place, and therefore achieve successful results, it is essential to match the site factors in your garden to the characteristics of the trees and shrubs.

### i) Site factors

Have a look around your site or garden and think about the following before you decide on what to plant:

**Soils:** What kind of soils do you have to work with? The importance of soils and how to determine what kind of soil you have was discussed earlier on page 24. On newly developed sites, the quality of the soil is sometimes poor (i.e. it has poor texture and low fertility) and/or it may be compacted (after being driven over by heavy machinery), which is not good for plant growth (because there are few air spaces remaining).

If the soil appears to be of poor quality it might be worth taking remedial action by, for example, rotavating the soil and/or bringing in some good quality topsoil prior to landscaping the site, to ensure healthy plant growth.

**Space:** Obviously it is important to consider the space available before you decide what to plant. You don't want to plant a tree that will quickly grow to be a giant in a tiny garden. There are several native trees and shrubs that will fit nicely into small spaces. The Tree Selection Guide on the inside back cover indicates the maximum size of the main native trees and shrubs. Remember that root spread often extends beyond the crown of the tree and therefore large trees should not be planted too close to buildings or walls.

If you have a lot of space and plan to plant quite a few trees, it might be worth considering which ones will provide you with a log or two for the fire. Some trees if cut down at ground level will re-sprout from the stump (e.g. ash, willow, hazel) and grow several trunks again (this form of tree or woodland management is known as coppicing). Ash is particularly suitable for coppicing and produces excellent firewood or timber (or hurleys!).

**Shade levels:** Is the area you want to plant shaded or does it receive full sunlight? Some trees can tolerate shade (e.g. holly and yew) but many don't (e.g. birch and ash).

**Top Left:** Well-staked birch planted in new housing estate

**Top Right:** Native Wild Cherry planted along boundary wall of small garden

**Bottom Right:** Copse of Birch in medium-sized garden



**Exposed and/or coastal areas:** Is your garden on the side of a hill receiving the full brunt of the prevailing winds? Certain trees are more tolerant of exposure than others (see below). Once you have created some shelter in your garden, you can grow a wider range of plants that are less tolerant of windy conditions. Creating a shelter-belt will help you enjoy being outdoors in your garden and can significantly cut your heating bills.

County Clare has a long coastline and much of the coastal zone is not very conducive to tree growth because it is exposed to salt-laden winds. Some trees and shrubs, however, do manage to survive in these areas and can be used to create a windbreak and provide shelter for your house and garden.

#### Native trees and shrubs that tolerate exposure

Common name	Latin name
Ash	<i>Fraxinus excelsior</i> *
Blackthorn	<i>Prunus spinosa</i> *
Broom	<i>Cytisus scoparius</i> *
Burnet rose	<i>Rosa pimpinellifolia</i> *
Gorse	<i>Ulex europaeus</i> *
Hawthorn	<i>Crataegus monogyna</i>
Holly	<i>Ilex aquifolium</i>
Juniper	<i>Juniperus communis</i>
Rowan	<i>Sorbus aucuparia</i>
Scot's pine	<i>Pinus sylvestris</i>
Whitebeam	<i>Sorbus aria</i> *
Willows	<i>Salix spp.</i>

\* Can also tolerate coastal conditions

See pages 9-22 for photos

## ii) Characteristics of our native trees and shrubs

The **Native Tree Selection Guide** on the inside back cover indicates the relevant characteristics of the main native trees and shrubs that you might consider planting. Soil preferences are described briefly here but are discussed in more detail on page 23. The Tree Selection Guide lists the maximum height of each of the trees and shrubs although size can vary considerably from site to site depending on the nature of the soil and local environment. Those trees and shrubs that are suitable for shaded or exposed gardens are also indicated.

Growth rate is important if you want something to quickly provide screening or shelter. The value of each species to wildlife (ie. biodiversity value) is also briefly described, which can help you decide what to plant if you want to create a wildlife-friendly garden. The most attractive features of each tree and shrub are noted to assist garden design.





Above & Left: Pot-grown trees



Clump of bare-root beech trees



Bare-root



Root-balled



Container

### 3. Types of planting stock available

People often don't realise when buying trees and shrubs that there is a range of sizes and types of planting stock available. The right choice for you depends on the scale of planting (a large area to be planted or a small garden), the planting scheme (e.g. a public green space where immediate impact may be required), and the nature of site (e.g. exposed or sheltered) and of course, the budget.

Trees and shrubs can be bought from a tree nursery, garden centre, or by mail order (see Appendix 1 for list of garden centres and nurseries in Co. Clare). The types of planting stock available include:

- i) bare-rooted trees in winter,
- ii) cell grown (plug) trees,
- iii) pot or container grown trees
- iv) root-balled trees.

Roots of bare-root tree



Planting stock comes in a range of sizes from 'whips' (45cm- 250cm height), to light standards (6-8cm girth), standards (8-10cm girth) and heavy standards (12-14cm girth), and various sizes in between.

The best approach when choosing trees is to buy a range of sizes. Large trees (heavy standards) make an immediate and often impressive impact adding instant maturity to your garden but they are more difficult to plant, require staking and can be expensive.

Smaller trees are easier to move and plant, are more likely to establish successfully, may not require staking, can adapt more easily to exposed sites, and are usually considerably cheaper (depending on the species). By purchasing one or two large trees (or more depending on space and budget) and several smaller trees, you can transform the green space around your house into a real garden.

Native trees and shrubs raised in Ireland from Irish seed (which have the maximum ecological value and are most likely to thrive) are increasingly available. Much of the stock for sale, however, is still grown from imported seed or plants. Ask about the origin of the plants before you buy. Let the staff in your local nursery or garden centre know you would prefer truly native stock. A demand will increase the supply. Most of the nurseries and garden centres in Co. Clare sell some native trees and shrubs but not all are grown locally or from Irish seed.



Pot-grown holly



Poor storage of bare-root stock (as above) will lead to drying out of the roots

## Buying native trees and shrubs

Questions to ask in the garden centre or tree nursery

- Is it native? Bring along the Tree Selection Guide on the inside back cover and check the Latin name.
- Is the stock grown from Irish seed?

## Tips for choosing a good tree or shrub

A good quality tree will have compact, bushy roots. The stem should be straight and the top should be intact, not broken off.

- Bare-rooted trees should be kept in the soil as long as possible to avoid the roots drying out. Once they are taken out of the soil at the garden centre, they should be kept in heavy plastic bags and stored in a cool dark dry place for a few weeks at most.
- If you can examine the roots of pot or container grown trees, try to ensure that they are not pot-bound (i.e. kept in the pot too long, the roots are cramped and ready to burst out of the pot).

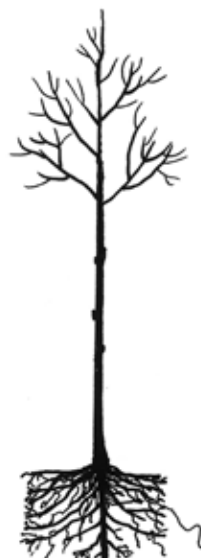
## i) Bare-rooted trees

Bare-rooted trees or 'whips' (i.e. they don't come in a pot and have little or no soil around their roots) are the cheapest option available. Whips are cheaper than nursery 'standards' (usually larger pot grown or root-balled trees), easier to transplant, and can often outgrow them in a few years.

The best size of young tree for most situations is the whip that is about 45cm to 100cm high. Taller specimens can be considered if planting in sheltered locations. Bare-rooted trees can only be planted in the dormant season when the leaves are off the trees (the beginning of December until the end of March or April for conifers such as Scot's pine and yew). Trees should be planted as soon as possible after buying.



Whip  
(1-1.5m)



Standard 3m  
(roots and stem pruned)



Heavy standard  
(roots and stem pruned)



Gery Leddin





*Trees add colour and interest to gardens, and provide shelter and privacy*



### ii) Cell grown (plug) trees

Trees are also available as cell-grown plants or plug trees. Plug trees are grown in a cell of compost and usually come in bundles of 15-30 in a plastic tray. They are usually quite small (<50cm). These trees are more expensive than the bare-rooted option but have the advantage of being able to be planted at most times of the year. It is advisable, however, to avoid planting them immediately after the young leaves have fully opened in early summer.

Plug trees should be planted in a hole big enough to fit the plug of soil. It is recommended to plant them a little deeper than the level of soil in the cell so that they don't pop out of the soil in frosty weather. Backfill around the tree and gently firm the soil around the tree with the heel of your foot.



*Plug Tree*

### iii) Pot grown and iv) Root-balled trees

Pot grown and root-balled trees are more expensive again and can be much larger than the previous two options. These trees can be planted any time of the year but it is also advisable to avoid planting immediately after the young leaves have opened.

Root-balled trees tend to be large trees (often >2.5m) that a tree nursery regularly lifts and root prunes to encourage the development of a network of fibrous roots surrounding a ball of soil. When the trees are to be delivered, the root-ball is covered in hessian sacking and wire mesh. These trees can be stored in a sheltered location but should be planted as soon as possible. The sacking and wire mesh does not need to be removed (they break down naturally).

Dig a large hole and bury the root-ball in the planting hole so that the top of the root-ball is just below the ground. Loosen the 'neck' of the root-ball to allow room for the trunk to grow, backfill around the tree and firm gently with the heel of your foot.

#### In summary

Type of planting stock	Planting time	Cost
Bare-rooted trees	Winter only	Generally inexpensive
Cell grown or plug trees	All year	Range from relatively inexpensive to very costly depending on the size, condition and species.
Pot-grown trees	All year	Cell grown and Plug Trees' are relatively inexpensive.
Root-balled trees	All year	



*Make sure planting hole much larger than root mass*



*Firm soil gently around young tree with boot*

## 4. How to plant a tree

When planting a tree, dig a hole that is a good bit larger than the root area of the tree. Break up the subsoil at the bottom of the hole with a spade (to encourage the roots to grow down in search of water and anchorage). Spread a layer of well-rotted farmyard manure, garden compost or slow-release fertiliser (available in garden centres) in the base of the hole to help the young trees get off to a good start.

Place the tree (which has been soaking in a bucket of water) in the hole making sure that there is enough room to spread out the roots. Try to ensure that the tree is planted at the same depth as it was when growing in the nursery. This should be a little bit above the highest roots and is marked by a change in the colour of the stem. Planting too deeply may result in the tree rotting while planting too shallowly may result in the tree drying out.

Fill in the soil over the roots ensuring that no roots or bark are damaged. Firm soil around the roots carefully with your foot and water well after planting to settle the soil around the roots. In an urban situation where the soil may be poor, it may be worth mixing some more mature, compost or fertiliser with the soil used to infill the planting hole.

Alternatively small whips can be planted by pushing a spade into the soil, levering it backwards and lifting it out, leaving a slit to hold the roots. Place the roots of the whip in the slit and heal it in by firming the soil around the plant with your foot to seal the hole.

It is not advisable to plant in very wet, windy or frosty conditions.

### To stake or not to stake

Trees grow best without stakes. Stakes should be used however when planting tall trees (>2m in height) or on an exposed site. The purpose of the stake is to protect the roots while they become established (not the stem) and stakes should be removed after a couple of years.

When staking a tree, secure the stake in the planting hole before you plant (after temporarily positioning the tree) so that you don't damage the roots. When the tree has been planted, attach the stake to the trunk with a tree tie (not too tight!). The stake should be positioned on the side of the prevailing wind and should only be one third the height of the tree. A double stake may be required for very large trees and/or in windy locations.



*Well-staked young Birch trees*



*A double stake*



**Top Left:** *Mulch around young trees to keep grass and weeds down*

**Top Right:** *Grass and weeds will compete with young trees for water and nutrients*

**Bottom Right:** *Keep young trees safe from livestock*



## 5. Ensuring successful results

You've spent the money planting a few native trees, so it's worth taking care of them! It doesn't take much effort but without some aftercare, many trees get choked by weeds, strangled by stake ties or slashed by strimmers and fail to reach their full potential, which can be disappointing.

Some tips for tree aftercare:

- Check young trees in the first few weeks after planting. Firm up the soil around them if necessary, especially after particularly windy weather in case the roots have loosened and the tree is in danger of being blown out of the ground.
- In dry weather, newly planted trees should be watered as their root system may not yet be fully developed. This is particularly important immediately after planting trees but also for the first growing season (i.e. spring until autumn).

- During the first few years young trees have to compete with grass and weeds for nutrients and water. Give them a helping hand by keeping a weed-free area around the tree. This is particularly important for small trees. Mulching is a simple and effective method for suppressing weeds around trees and at the same time keeping the ground surface moist and cool. A good mulch can be achieved by placing shredded bark, grass clippings or even newspapers around the base of the stem to keep the weeds down.

- If your tree is supported with a stake, don't forget to loosen the tie as the girth of the tree expands otherwise your tree will be strangled and won't reach its full potential.
- Be careful when using tools around trees, especially with strimmers and lawnmowers. Cutting or slashing the bark can lead to tree death.





# Designing with native trees and shrubs





*The problem with planting trees in lines is that if one stem dies or breaks it is very noticeable*

The Native Tree Selection Guide (inside back cover) will help you select native trees and shrubs that will grow well in your garden or site or space. As discussed earlier on page 30, you also need to think about site factors (such as space, soils, exposure etc), why you want to plant trees and the function of the planting (to make a garden more attractive, wildlife friendly and/or to add privacy and shelter etc.) before you purchase your trees and shrubs.

The next thing to consider is the design of the area to be planted or the landscaping scheme. When incorporating trees and shrubs into the design of a garden, public green space, housing estate etc., there are many attractive features to work with, including the shape or form of the tree, colour of the foliage (which might change during the seasons) and texture, colour and pattern of the bark, flowers and fruits, whether the tree is deciduous (loses its leaves in winter) or evergreen etc.

Planting with native trees and shrubs provides the opportunity to create a more natural look to your garden or green space, but native trees can also be planted effectively in formal designs if desired.

*Planting trees and shrubs in groups is more effective. Groups of the same species often look good together. For example, groups of guelder rose, rowan, hazel or birch work well in small to medium-sized gardens; in a bigger space, stands of wild cherry, Scot's pine or whitebeam can be very effective. Or choose groups of species with contrasting colour, texture, shape and height.*



*Trees lining the driveway to a house*

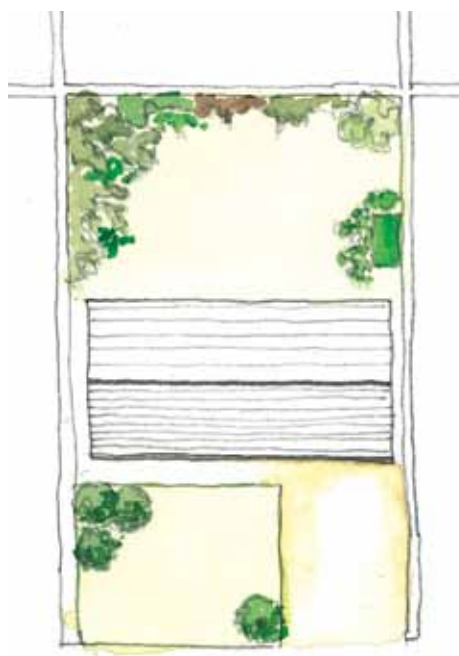
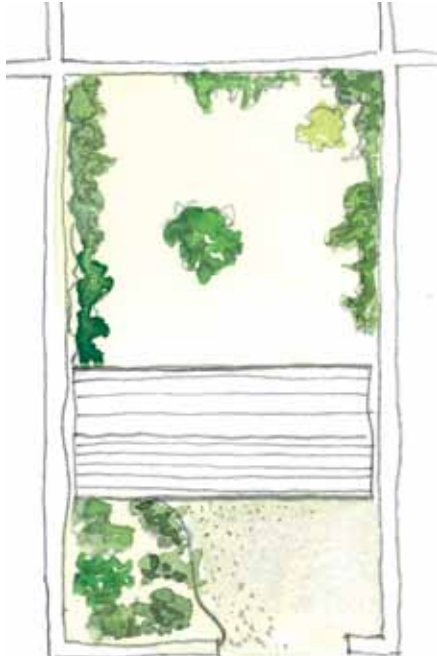


*Tree planting greatly enhances the Glór building*

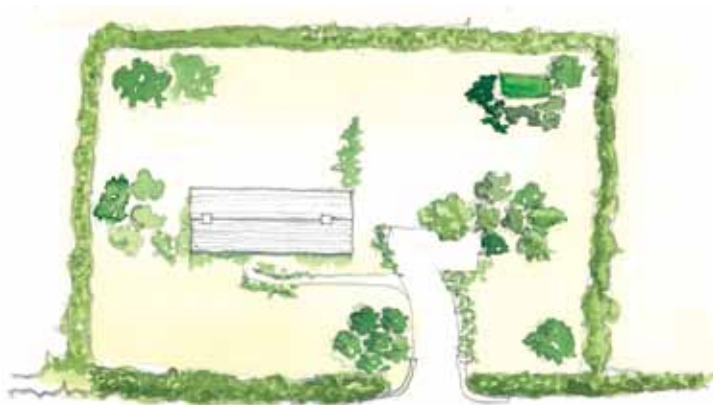
Very often trees are planted in unimaginative rows (like soldiers!) or as a few isolated specimens. Planting in regularly spaced straight lines should be avoided, unless formality is meant to be a feature of the design (or along avenues and boundaries).

Trees like company. Planting trees and shrubs in groups is often more effective and attractive than planting isolated trees, which can take many years to achieve an impact. When planted in groups they protect each other by forming their own micro-environment, which improves growth. A more natural effect is achieved if odd numbers of trees are planted in irregularly spaced groups.

Alternatively a collection of species with different sizes, shapes and colours can be very attractive when planted together in a group. For example, mixes of rowan, holly, hazel, crab apple, guelder rose and birch are suitable for relatively small spaces. Wild cherry, oak, Scot's pine, whitebeam, elm and ash can also be included if planting a larger area. There is usually enough space in the smallest of gardens for a cluster of small trees and shrubs such as holly (which is very slow growing), guelder rose, juniper and/or rowan.



*Native trees and shrubs can be incorporated into urban and/or small garden designs; they can help add privacy, soften hard edges and add colour and texture to your garden. Here are a couple of design plan ideas*



*Groups of trees and shrubs can be placed strategically to break up a large garden, providing privacy, screening and/or shelter.*



*Trees and shrubs can be also planted as a bank to intercept the prevailing wind.*



*Holly and Spindle along garden wall*

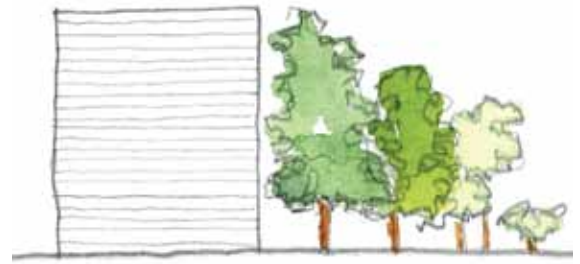




*Native hedge provides screening and shelter for house*



**Native trees and shrubs can be used effectively to screen large structures by using a range of sizes, shapes and colours**



If you dream of a low maintenance garden, planting a mix of trees, smaller trees, shrubs and low growing shrubs together to mimic a mini-natural woodland can be very effective and visually appealing. There is no need to mow the grass around the trees as the smaller shrubs will keep the grass and weeds down. If you are patient, beautiful woodland herbs such as primrose, lords and ladies, bluebells and/or wild garlic might start to appear in the woodland habitat that you have created (which will also be very attractive to wildlife).

Just make sure that the species you are thinking of planting together like similar conditions (soil, shade, exposure etc.) and are suitable for your particular site.

In order to produce a scheme which will be effective throughout the year, it is worthwhile to consider the seasonal variations of trees. Colours should blend harmoniously and be appropriate to the site (especially in rural areas). In some situations the foliage can be used to complement or contrast with building materials.

Trees and shrubs can also be planted as individuals to form a focal point (e.g. a majestic oak) or fill a small space (e.g. holly, hazel or rowan).

In many cases the purpose of tree planting efforts is to screen a large structure, improve the appearance of industrial buildings and/or provide shelter. Fast-growing non-native conifers are widely used, but effective and more attractive screening can be achieved using a mix of native species. Trees with fast growth rates (e.g. alder, aspen) should be used to achieve a screen as quickly as possible, but a mix of other species of a range of sizes, texture and colour should also be employed to ensure the planting is attractive all year round and provides adequate screening (e.g. Scot's pine, birch, hazel, holly). Mixed species planting will also have greater benefits for wildlife.

**Finally, when developing a new site try to make the most of the existing features and retain mature trees, shrubs and native hedgerow. They will add a sense of maturity to the development, save money on landscaping costs and provide enormous benefits to wildlife. Existing vegetation can be complemented by new planting to create a very attractive, mature garden or green space.**



### Landscaping in housing estates

Native trees and shrubs are also appropriate for landscaping schemes in suburban settings and can be used to great effect. Landscaping efforts in housing estates often fail because trees are planted in poor soil and they receive little or no aftercare (e.g. neglecting to remove ties that are too tight or to replace broken and dead stems).



*Young Willow hedgerow along house boundary*



*Mature hedgerow retained in new housing estate*



**Left:** Unfortunately mature trees are still often destroyed to make way for housing even though their presence could improve the appearance of the estate and increase property values

*Birch leaves and red 'Lucifer' Iris flowers*



*House with native hedging*

Many planting schemes leave a lot to be desired and could be greatly improved with a little imagination.

**Here are some suggestions:**

- Existing trees, shrubs and hedgerows should be retained. They will add a sense of maturity to the development (which has been shown to increase property values), and will bring benefits to wildlife and the environment. Landscaping costs will be significantly reduced if existing vegetation is retained.
- When retaining trees and shrubs it is critical that they are adequately protected during the construction process to avoid damage (see page 50 for more information).
- A wide mix of species with different attributes should be used to improve the aesthetic character of new planting schemes. New planting should complement the existing vegetation.
- Planting trees and shrubs in groups is often more effective and attractive than planting individuals. Groups of trees are also more likely to do well.
- A range of tree stock sizes should be used. Large specimens create an instant impact but smaller plants are more likely to establish successfully.
- Efforts should be made to ensure that the soil in the planting area is of good quality. If not, remedial action should be taken such as rotavating the soil and/or bringing in good quality topsoil.



*Example of poor practice where the trees were planted in poor soil and the stake ties were never removed leading to premature tree death*





# Hedgerows





**Top Left:** Hedgerow removal for one-off housing is not always necessary

**Top Right:** Here the original boundary has been retained and enhanced with new planting

**Bottom Left:** Hedgerows and hedgerow trees can be retained in large developments too

**Bottom Right:** Retaining hedgerows along new housing boundaries ensures privacy while splayed entrance meets road safety requirements

In Clare, as much of the landscape is dominated by agriculture, hedgerows act as a haven for wildlife. They form wildlife corridors that allow animals, big and small, to move through the landscape, while providing much-needed food and shelter. Hedgerows also provide shelter and screening for housing and road users, and absorb road noise; improve the scenic appearance of the landscape; form excellent boundaries for single and clustered housing; and finally, they are part of our historical and cultural heritage and thus help create a sense of place.

There are three main options for hedgerow management on developments sites, in order of priority:

1. Retain existing native hedgerows
2. Move native hedgerow to a new location
3. Planting a new native hedgerow



*Hawthorn berries*

## 1. Retaining existing native hedgerows

When developing a site, every effort should be made to retain existing hedgerows. Most planning conditions granted by Clare County Council state that hedgerows, as well as existing trees, should be retained on a site in order to protect the rural character of the landscape.

When a hedgerow is to be retained, it should be protected from all construction activities by erecting a sturdy fence (as described in detail and illustrated on page 49), and it should not be seen as a dumping ground during the building process. Retaining hedgerows around the site boundary will save considerable expenditure on alternatives such as fencing or stone walls. It will also have enormous benefits for wildlife.

Existing hedgerows can be enhanced if necessary by trimming, laying, and infill planting in gaps if required. Teagasc, the Heritage Council, ENFO and Crann (see Appendix 3) provide advice on their websites and in various publications on hedgerow management.





## 2. Moving a hedgerow

If an existing road-frontage hedgerow has to be removed when developing a site for housing, why not consider moving the hedgerow to form the new site boundary at the desired location? If a digger is on site to excavate for foundations and/or services, it could also be employed to move hedgerow plants. Great care needs to be taken when moving a hedgerow, however, and an experienced digger driver who has a clear understanding of the need to minimize damage to the hedgerow shrubs is essential.

If moving a hedgerow, it must be done during the winter when the plants are dormant (late December to the end of March). The plants should be pruned hard or coppiced prior to removal. They should be lifted very carefully using a digger bucket and every effort should be taken to minimize damage to roots and stems. The plants should be placed immediately and carefully into a prepared trench. Efforts should also be made not to compact the soil by driving heavy machinery along the site of the 'new' hedgerow.

## 3. Planting a new native hedgerow

Far too often, non-native hedging species are planted along the site boundaries of houses (e.g. Lawson cypress, Leylandii, Griselinia). Many native species of shrubs and small trees can be used to produce highly attractive and functional hedgerows, and their use is more appropriate in a rural setting.

Site preparation is essential for the successful growth of a new hedge. Dig the soil to 25cm deep and 50cm wide keeping about one metre away from the fence or wall. If possible spread well-rotted farmyard manure or slow-release fertilizer where the hedge is to be planted. In order to keep the weeds down once the hedge is planted, it is worth considering the use of a geotextile ground cover. Spread it out over the prepared soil prior to planting and dig in the sides to prevent it from blowing away.

Using bare-rooted trees is the most economical way of planting a hedge (remember they can only be planted from late December until the end of March). Follow either of the two methods for planting trees described on page 37.

**Left:** *Mature Hawthorn can be coppiced in winter to promote new shrubby growth (i.e. cut hard and it will resprout)*

**Right:** *Native Hazel hedgerow in rural garden*



**Left:** Holly hedge with berries

**Top Right:** Hawthorn hedge with large Ash tree

**Bottom Right:** Road-side hedge with large ash and Sycamore trees



The hedging plants should be planted in a double row of staggered plants using approximately six hawthorn plants/metre (for a mainly hawthorn hedge). If using ground cover, cut small crosses in it in which to plant the young shrubs and fold it back into position around the base of the plant after planting. Spread a layer of shredded bark, gravel or wood chips over the ground cover.

Water a newly planted hedge during dry spells and pull re-colonizing weeds back off the ground cover during the growing season. If you don't use a geotextile ground cover, a good use for grass clippings is to distribute them along the base of your hedge to keep down weeds.

Remember hedges need to be cut! Many hedgerow plants will grow into small trees or large shrubs if not trimmed. Hawthorn stems can be cut back to 10cm height immediately after planting so that they will grow into bushy plants with several stems.

Before selecting species for a new native hedge, have a look at hedgerows in the surrounding landscape to see what is there and consider using the same. Using a range of species creates a more attractive hedge that is of greater value to wildlife. Hawthorn (whitethorn) and hazel are the most common hedgerow shrubs in Clare. For further information on hedgerow planting, see Teagasc and Crann publications and websites (Appendix 3).

## Plants for Hedgerows:

### Suitable plants for native hedgerows:

Hawthorn; Privet; Blackthorn; Honeysuckle; Dog rose; Hazel; Guelder rose; Spindle; Holly; Cherry and Gorse\*

**Wet ground:** Willow; Alder

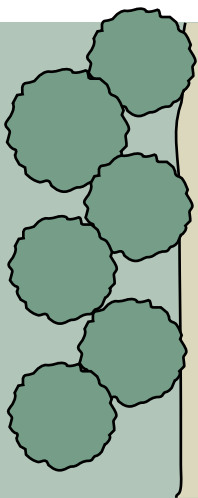
**Hedgerow trees:** Ash; Crab apple; Whitebeam

\* Can be invasive but highly tolerant of exposed sites

### Non-native hedging species to be avoided in rural areas:

Sycamore; Snowberry; Box; Rhododendron; Cypress; Leylandii and Cherry laurel (because of aggressive growth patterns or poisonous plant parts).

Grisilinia and Escallonia are more appropriate in a suburban rather than a rural setting.



Plant hedges using a double row of staggered plants



# Keeping existing trees and shrubs in new developments

Mature trees and shrubs greatly improve the appearance of new houses, adding a sense of maturity to the site, and providing privacy and shelter. However, efforts to retain existing trees on development sites often fail because the trees are not protected adequately during the construction process. The crown and trunk of the tree may be intact but the roots may have been damaged, which can lead to a loss of vigour, die-back and in some cases, premature death of the tree.

Few people realize that the most vulnerable part of a tree is actually its root system. Tree roots are usually ignored because they are underground and therefore not visible. The effects of damage to roots may only become evident several years later and may have serious consequences for the tree. The roots of a mature tree mostly spread outwards (not downwards!) to at least the full extent of the crown and often beyond.



Certain activities must be avoided within the rooting area of a tree to avoid damage:

## Do not

- Drive over the roots of trees/shrubs compacting the soil
- Raise or lower the soil level around trees
- Cover the rooting area with tarmac or other impervious materials
- Change the water table
- Excavate in the rooting area
- Deposit toxic materials around trees
- Damage the bark or branches of trees
- Light fires close to trees
- Store materials under trees

## Do

- Erect robust fencing around any trees and shrubs to be retained

**The single most important thing to do when retaining trees on developments sites is to adequately protect the tree during the construction process by fencing off the area around the crown of tree.**

**Left:** *Large Pine and new planting frames modern buildings well*

**Right:** *Large Ash retained in new development but not protected*

**Left:** *Mature trees greatly enhancing setting of new house*



**Above:** Mature trees and new planting work well and link garden with wider landscape

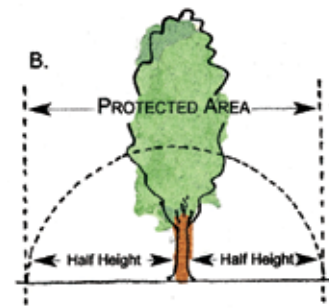
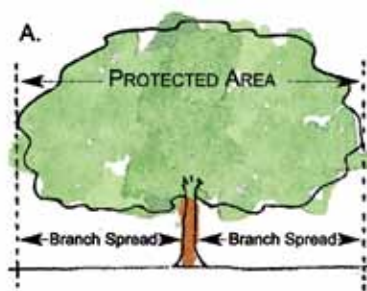
**Below:** Dry stone wall and native shrubs at house entrance

A tree protection area should be established around each tree or group of trees by erecting an immovable barrier prior to any development of the site. The protected area should be large enough to provide sufficient protection for the tree rooting zone. Usually at least the area encompassing the crown of the tree should be included and an area much wider than the crown for tall trees with short branches, for example Scot's pine.

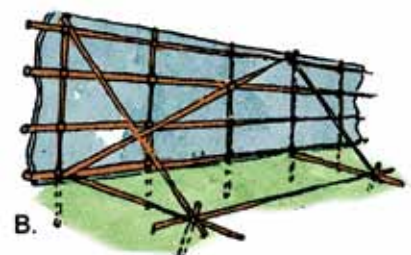
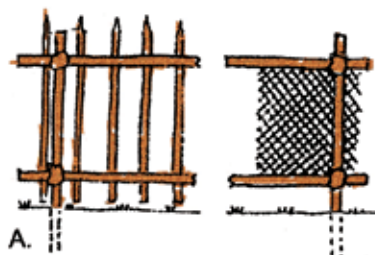
This area must be clearly signed and should not be moved for the duration of the development. Robust fencing at least 1.2m high should be used for the barrier. Make sure construction workers are fully aware of which trees and shrubs are to be retained so that the trees are adequately protected at all times.

When retaining a hedgerow as a boundary feature or as a feature within a large housing development, the same principle applies in order to protect the component trees and shrubs. The hedgerow should be fenced off effectively for the duration of the development works.

**Expert advice should be sought for large developments that impact on trees and for sites of high conservation value.**



Guide to identifying the minimum area around trees that should be protected (either A. or B. whichever is greater). These tree protection areas should be clearly signed and surrounded by a protective barrier.



Examples of appropriate fencing for tree protection areas. A. for normal trees/conditions of B. for special trees/conditions.



## Trees and hedgerows and the law

The County Clare Development Plan strongly promotes the protection of trees and hedgerows on the Clare landscape because of their aesthetic, amenity, environmental and wildlife value.

One of the policies in the plan states that existing trees and hedgerows should be retained and integrated into the overall landscaping scheme, where possible, on development sites. In addition, trees and shrubs to be retained should be adequately protected during the construction phase to ensure their survival.

Another policy promotes landscaping in an informal pattern with native trees and shrubs. In developments where hedgerows have to be removed for road safety purposes, moving an existing hedgerow to a new location is promoted as an option.

Policies in the County Development Plan are implemented mainly through planning control. The Planning Authority will normally only permit development where trees and groups of trees of high amenity value are retained.

Clare County Council does not permit the removal of trees or shrubs on a proposed development site prior to obtaining planning permission. Clearing the site will detract from the potential to integrate the development into the surrounding landscape and may reduce the financial value of the completed works.

You may be requested as part of future possible planning permission to compensate for the loss of these trees on the site. For example, if one tree is removed you may be asked to replant with trees of high amenity and wildlife value.

The main aim of the County Clare Heritage Plan is 'to promote awareness and understanding, leading to a greater appreciation and ownership of our natural, built and community heritage, through the implementation of specific actions to optimise the unique character of County Clare'.

This publication is an action of the Heritage Plan, which specifically promotes the planting of native trees and shrubs.

**Top:** Hedgerows are often removed for agricultural intensification and to make way for housing



**Top Left:** *Native hedgerow*

**Top Right:** *Ash tree*

**Bottom Left:** *Tree felling*

### Tree felling licence

Few people realise that under the 1946 Forestry Act it is illegal to uproot or cut down any tree over 10 years of age without applying for a felling licence. While there are some exceptions to this act, advice should be sought prior to cutting down any mature trees. Contact the Forest Service for more information (the Forestry Inspector in Clare can be contacted at 065 686 5986). An application form for a tree felling licence can be obtained from your local Garda station.

### Hedgerow cutting restrictions

The best time to cut hedgerows is in winter when the plants are dormant and the bird-nesting season is over. Hedges provide the ideal nesting habitat for many of our countryside birds. In spring and summer hedgerows are bustling with activity as a myriad of wildlife utilise hedges because of the wide range of food and shelter that they provide.

The Wildlife (Amendment) Act 2000 actually prohibits the cutting of hedgerows during the critical bird-nesting period in spring and summer (1st March to 31st August) because of the devastating impact on nesting birds and other wildlife.

Hedges have little other legislative protection and therefore it is important that the hedge cutting restrictions are adhered to as hedgerows are such an incredibly important resource for wildlife. Contact your local conservation ranger if you have concerns about hedgerow cutting, especially mechanical cutting, in your area (see Appendix 3 for contact details).

Clare County Council must balance the requirements of wildlife legislation, as well as, ensuring hedgerows on public roads are not a danger to road safety. While every effort is made to avoid hedgerow cutting during the bird-nesting season, in some occasions it may be necessary. Where Clare County Council's Area Engineer deems it necessary to undertake hedgerow cutting within the bird nesting season for road safety reasons, then he/she will provide prior written notification to the National Parks and Wildlife Service, giving them an opportunity to comment.

**Right:** *Hedgerows provide important nesting sites for many birds*





# The final word on native trees and shrubs

Hopefully this guide will inspire you to consider planting some native trees and shrubs in your garden or green space. It should provide you with the know-how to purchase with confidence, plant and care for your trees successfully.

After buying a new house it really is worth doing justice to your investment by planting trees and shrubs to create a beautiful setting for your home.

Many of our native trees and shrubs are very attractive and have the potential to add beauty, seasonal interest and wildlife value to gardens, big and small.

Retaining existing trees and hedgerows in new developments, and landscaping with native trees and shrubs, helps to integrate new houses into the rich and diverse landscapes of County Clare.



*Iniscealtra Park, Mountshannon*

## Where to enjoy trees and woodlands in County Clare

There are many places in the county where you can enjoy the company of trees; beautiful gardens and parks to wander in and woods to explore. The spectacular Vandeleur Walled Garden in Kilrush is set among 420 acres of woodland and contains many beautiful tree specimens and shrubs ([www.vandeleurwalledgarden.ie](http://www.vandeleurwalledgarden.ie)). The community park in Mountshannon, Aistear Iniscealtra, is a wonderful example of what communities can do when they pull together. Thousands of trees and shrubs were planted in and around a large green area, with a fantastic maze as the main focal point of the park.

There are also many woods around the county to go adventuring in. Coillte owns several properties in the county that are accessible to the public- at Cahermurphy near Lough Graney (some of which is a Nature Reserve), Gagan's Wood, Ballycurragan on the shore of Lough Derg south of Scarriff, Doon near Broadford, and Kilrush (around the Vandeleur Walled Garden). For more information and trailmaps see [www.coillteoutdoors.ie](http://www.coillteoutdoors.ie).

Other woodland sites worth a visit include Dromore Nature Reserve north of Ennis and Keelahilla (Slieve Carron) Nature Reserve in the Burren

**Above:** *Gorse in flower*

*Sloe berries, Hawthorn berries and Willow flowers (male catkins)*





**Top Left:** *Ivy leaves in frost*

**Top Right:** *Hawthorn flowers*

**Bottom Left:** *Holly*

## Remember

1. Native trees and shrubs add immeasurable beauty and interest to gardens, green spaces and landscapes. They also have enormous value for wildlife. When landscaping think trees and think native!
2. When planting trees it is important to think about what you hope to achieve before you begin. Choosing the right trees or shrubs for your site and space is critical. Selecting the right type of stock for your purposes and planting well is also essential. Good aftercare will ensure successful results. The aim of all tree planting efforts should be to plant the right tree in the right place.
3. Natural landscaping schemes using native trees and shrubs in planted groups, banks or clusters can be extremely attractive. When designing your garden or green space, be imaginative and avoid planting lines of trees like soldiers!
4. Native hedgerows can make highly attractive boundaries for housing and should be retained in new developments. If necessary, hedgerows can be moved or new hedgerows composed of native shrubs and trees can be planted. Hedgerows are an invaluable resource for wildlife and a prominent feature on the Irish landscape that should be conserved.
5. Remember that retaining trees, shrubs and hedgerows on new development sites helps create a mature garden or green space instantly, mitigate the impact of new developments on the landscape, and has enormous benefits for wildlife and the environment. Keep what you already have and use it to best advantage.

Comments and suggestions for future editions of this guide are welcomed and can be sent to either the:

Environmental Awareness Officer,  
E-mail: [enviroff@clarecoco.ie](mailto:enviroff@clarecoco.ie),

or

Heritage Officer, [plnnoff@clarecoco.ie](mailto:plnnoff@clarecoco.ie)

Clare County Council,

Ennis.

Tel: 065 682 1616



# Appendices



# Appendix 1: Garden centres and nurseries in Co. Clare that sell native trees/ shrubs to the public:

## **Vaughan's Garden Centre**

Gort Road, Ennis  
(065) 6893408

## **Hawthorn Nurseries**

Clohanmore, East Cree,  
Kilrush  
(065) 7087690

## **Little Moon Garden Centre**

Mullagh  
(065) 7087655

## **Kilshanny Nurseries & Garden Centre**

Carrowduff, Lahinch  
(065) 7071489

## **James Devitt Hardware & Garden Centre**

Main St., Ennistymon  
(065) 7071191

## **Clonroad Garden Centre**

Clonroad Business Park, Ennis  
(087) 6856848

## **Ennistymon Garden & Patio Centre**

Circular Rd., Ennistymon  
(065) 7072009

## **Monvana Garden Centre**

Monvana, Kilrush  
(065) 9051113

## **Shannon Garden Centre**

Smithstown  
(061) 363299

## **Dairygold Co-op**

SuperStores  
Bunratty  
(061) 361223

## **The Garden Rooms**

Clondrinagh, Ennis Rd.,  
Limerick  
(061) 452706

## **Irish Seedsavers Association**

Capparoo, Scarriff  
(061) 921866

Other large nurseries that  
grow and stock native trees and  
shrubs grown from Irish seed:

## **Future Forests\***

Ballingeary road, Kealkil,  
Bantry, Co. Cork  
(027) 66176  
[www.futureforests.net](http://www.futureforests.net)

## **None so Hardy**

Shillelagh, Co. Wicklow  
(053) 9429105

## **Coillte Nurseries**

Ballintemple, Adrattin,  
Co. Carlow  
[www.coilltenurseries.ie](http://www.coilltenurseries.ie)  
(059) 9155621

## **SAP Nurseries**

Garnavilla, Cahir  
Co. Tipperary  
(052) 42222  
[www.sapgroup.com](http://www.sapgroup.com)

*\* Extensive mail order  
catalogue*

## Appendix 2: List of trees and shrubs native to Ireland\*

Species	Latin Name
Alder	<i>Alnus glutinosa</i>
Alder buckthorn	<i>Frangula alnus</i>
Apple, crab	<i>Malus sylvestris</i>
Ash	<i>Fraxinus excelsior</i>
Aspen	<i>Populus tremula</i>
Birch, downy	<i>Betula pubescens</i>
Birch, silver	<i>Betula pendula</i>
Black poplar	<i>Populus nigra</i> **
Blackthorn/ sloe	<i>Prunus spinosa</i>
Broom	<i>Cytisus scoparius</i>
Buckthorn	<i>Rhamnus catharticus</i>
Cherry, bird	<i>Prunus padus</i>
Cherry, wild	<i>Prunus avium</i>
Dog rose	<i>Rosa canina</i>
Elder	<i>Sambucus nigra</i>
Elm, wych	<i>Ulmus glabra</i>
Gorse, autumn	<i>Ulex gallii</i>
Gorse, common	<i>Ulex europaeus</i>
Gelder rose	<i>Viburnum opulus</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Holly	<i>Ilex aquifolium</i>

Species	Latin Name
Juniper	<i>Juniperus communis</i>
Mountain ash, rowan	<i>Sorbus aucuparia</i>
Oak, pedunculate	<i>Quercus robur</i>
Oak, sessile	<i>Quercus petraea,</i>
Privet	<i>Ligustrum vulgare</i> **
Scot's pine	<i>Pinus sylvestris</i> **
Spindle/ pegwood	<i>Euonymus europaeus</i>
Strawberry tree	<i>Arbutus unedo</i>
Whitebeam species	<i>Sorbus hibernica</i> <i>S. aria</i> <i>S. rupicola</i>
Willow	<i>Salix triandra</i>
Willow	<i>Salix herbacea</i>
Willow	<i>Salix myrsinifolia</i>
Willow, bay	<i>Salix pentandra</i>
Willow, creeping	<i>Salix repens</i>
Willow, eared	<i>Salix aurita</i>
Willow, goat	<i>Salix caprea</i>
Willow, tea-leaved	<i>Salix phylicifolia</i>
Willow/ purple osier	<i>Salix purpurea</i>
Willow/ sally	<i>Salix cinerea</i>
Yew	<i>Taxus baccata</i>

\* Dwarf shrubs not included

\*\*Native status debatable

Source: Webb, D.A., J. Parnell and D. Doogue. 1996. *An Irish Flora*. Dundalgan Press, Dundalk.

## Appendix 3: Useful organisations and websites

### **Clare Local Development Company (CLDC)**

Unit 1 Westgate Business Park  
Kilrush Road  
Ennis  
Co. Clare  
(065) 6866800  
www.eldc.ie

### **Clare County Council**

Áras Contae an Chláir  
New Road  
Ennis  
Co. Clare  
(065) 6821616  
www.clarecoco.ie  
  
Environmental Awareness  
Officer  
(065) 6846331  
enviroff@clarecoco.ie

Heritage Officer  
(065) 6846408  
cmcguire@clarecoco.ie

### **Crann**

PO Box 860  
Celbridge  
Co. Kildare  
(01) 6275075  
www.crann.ie

### **Teagasc**

Station Road  
Ennis  
Co. Clare County Council  
(065) 6828676  
www.teagasc.ie

### **The Heritage Council**

Áras na hOidhreachta  
Church Lane  
Kilkenny  
(056) 7770777  
www.heritagecouncil.ie

### **The Forest Service**

District Forestry Inspector  
(065) 6865986  
www.agriculture.gov.ie

### **The Tree Council of Ireland**

Seismograph House  
Rathfarnham Castle  
Rathfarnham  
Dublin 14  
(01) 4931313  
www.treecouncil.ie

### **ENFO**

www.enfo.ie  
  
National Parks and Wildlife  
Service  
(065) 6837201  
www.npws.ie

### **CELT (Centre for Environmental Living and Training)**

c/o East Clare Community  
Co-op  
Scariff  
Co. Clare  
www.celtnet.org  
info@celtnet.org  
(061) 640765/  
(087) 6324644

### **Irish Seed Savers Association (ISSA)**

Capparoe  
Scariff  
Co. Clare www.  
irishseedsavers.ie  
info@irishseedsavers.ie  
(061) 921866

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Rural Environment Protection Scheme. Farmer's Handbook for REPS 3.  
The Department of Agriculture and Food.

# Native Tree Selection Guide for County Clare

Common name Latin Name	Soil Preferences	Max. Height (m)	Tolerates some shade	Tolerates exposure	Growth Rate	Suitable in hedges	Biodiversity Value	Attractive Features
Alder, Common <i>Alnus glutinosa</i>	Grows in a wide variety of conditions including wet soils	20			F	Yes	Birds, insects, squirrels, lichens	Cones
Apple, Crab <i>Malus sylvestris</i>	Thrives in most fertile soils (not acid or wet)	16			S	Yes*	Birds, insects	Flowers and fruit
Ash <i>Fraxinus excelsior</i>	Grows in a wide range of soils (not acid)	28		Yes**	M	Yes*	Birds, bats, squirrels, lichens, insects	Foliage
Aspen <i>Populus tremula</i>	Prefers damp, neutral soils (not acid)	24			F		Insects	Autumn colour
Birch, Downy <i>Betula pubescens</i>	Grows in a wide variety of soils (prefers acid to neutral)	24m			F/M		Insects and lichens	Catkins, bark, foliage, autumn colour
Birch, Silver <i>Betula pendula</i>	Prefers dry soils, acid to neutral	18m			F/M		Birds, insects, squirrels, lichens, fungi, deadwood	Catkins, bark, foliage, autumn colour
Blackthorn, Sloe <i>Prunus spinosa</i>	Grows in a wide variety of soils	4		Yes**	M	Yes	Birds and insects	Flowers, berries
Broom <i>Cytisus scoparius</i>	Prefers light, dry, acid soils	2		Yes	F		Insects	Flowers
Buckthorn, Purging <i>Rhamnus cathartica</i>	Prefers damp and lime-rich soils	5			M		Birds, insects	Berries
Cherry, Bird <i>Prunus padus</i>	Prefers damp soils (acid to neutral)	6	Yes		M		Birds, insects	Flowers, berries, autumn colour
Cherry, Wild <i>Prunus avium</i>	Prefers fertile, deep well-drained soils that are slightly acid	15	Yes		F/M	Yes	Birds, insects	Flowers, berries, autumn colour
Dog Rose <i>Rosa canina</i>	Tolerates a wide range of soils (not acid)	2			F	Yes	Birds, insects	Flowers, berries
Elder <i>Sambucus nigra</i>	Grows in a wide variety of soils (not acid)	6			F	Yes	Birds, insects	Flowers, berries
Elm, Wych <i>Ulmus glabra</i>	Prefers fertile free-draining soils	30	Yes		M	Yes*	Insects, squirrels, lichens, deadwood	Autumn colour
Gorse, Common <i>Ulex europaeus</i>	Prefers dry and neutral to acid soils	3		Yes**	M	Yes	Insects	Flowers
Guelder Rose <i>Viburnum opulus</i>	Prefers damp lime-rich soils	4	Yes		M	Yes	Birds, insects,	Flowers, berries, autumn colour
Hawthorn <i>Crataegus monogyna</i>	Grows in a wide variety of soils (not acid)	8	Yes	Yes	F/M	Yes	Birds and insects	Flowers, berries
Hazel <i>Corylus avellana</i>	Grows in a wide variety of soils (not acid)	6	Yes		F/M	Yes	Birds, bats, insects, squirrels, lichens	Catkins, nuts
Holly <i>Ilex aquifolium</i>	Grows in a wide variety of soils	15	Yes	Yes	M/S	Yes	Birds, insects, lichens	Evergreen, flowers, berries
Honeysuckle <i>Lonicera periclymenum</i>	Prefers neutral to acid soils	Climber	Yes		M		Birds, insects	Flowers, berries
Juniper <i>Juniperus communis</i>	Grows in rocky areas	6		Yes	M		Birds	Evergreen
Oak, Pedunculate <i>Quercus robur</i>	Prefers well-aerated, deep fertile soils. Thrives on heavier soils	30			M		Birds, bats, insects, fungi, deadwood	Foliage; autumn colour
Oak, Sessile <i>Quercus petraea</i>	Prefers well-drained, acidic to neutral soils. Tolerates less rich and lighter soils than Q. robur.	30			M		Birds, bats, insects, fungi, deadwood	Foliage; autumn colour
Rowan <i>Sorbus aucuparia</i>	Grows in a wide variety of soils	10		Yes	F		Birds, insects, lichens	Flowers and berries
Scots Pine <i>Pinus sylvestris</i>	Prefers dry, light soils.	24		Yes	M		Birds, insects, red squirrels and lichens	Cones, evergreen
Spindle <i>Euonymus europaeus</i>	Prefers soils damp, lime-rich soils	7	Yes		M	Yes	Insects	Autumn colours, berries
Whitebeam, Irish <i>Sorbus aria</i>	Prefers neutral to lime-rich soils	15	Yes	Yes**	M	Yes*	Birds, insects	Flowers and berries
Willows <i>Salix spp.</i>	Generally prefer damp soils with heavy to medium texture	8		Yes	F	Yes	Birds, insects, lichens, fungi, deadwood	Catkins, autumn colour
Yew <i>Taxus baccata</i>	Prefers dry, lime-rich soils	15	Yes		S		Birds	Berries, evergreen

\* Suitable as a hedgerow tree; \*\* Tolerant of coastal sites; F = Fast, M = Medium, S = Slow



# Buds of the Banner

A Guide to Growing Native Trees and Shrubs in Clare



*"This is a very impressive publication, which I'm sure will be very much in demand and should be a most useful guide to a whole cross section of people in County Clare and elsewhere".*

**Éamon de Buitléar**

*Not surprisingly, feedback from customers who have read 'Buds of the Banner' is very positive, as it informs the reader of the importance, simplicity and above all, the benefits of growing suitable native plants in their area. I highly recommend Dr. Fuller's book to all gardeners".*

**Billy Merriman,**

Little Moon Garden Centre, Mullagh, Co. Clare

*"If you've ever wondered which trees and shrubs are most suitable for your Clare garden – then look no further. This practical guide tells you all about the great variety of trees and shrubs that are native to County Clare.*

*You can choose for colour, shape, height and wildlife value, and to suit your soil and site conditions. This step by step guide will show you where and how to plant your native trees and shrubs, including some great design ideas for the garden.*

*Learn how to look after your existing hedgerow and how to plant a new native hedgerow. The guide is full of practical ideas for making your garden, village or housing development more attractive and nature friendly by planting native 'Buds of the Banner'.*

*So let's all grow native..."*

**Dr. Janice Fuller, Author**

